

## Captcha

**Are you a bot?**

Liam says to Emma: "It's a beautiful day, isn't it?"

Who is Liam talking to? (case sensitive)

**Are you a bot?**

Mia says to Benjamin: "It's a beautiful day, isn't it?"

Who is Mia talking to? (case sensitive)

**Are you a bot?**

William says to Ava: "It's a beautiful day, isn't it?"

Who is William talking to? (case sensitive)

**Are you a bot?**

Amelia says to Noah: "It's a beautiful day, isn't it?"

Who is Amelia talking to? (case sensitive)

**Are you a bot?**

Evelyn says to James: "It's a beautiful day, isn't it?"

Who is Evelyn talking to? (case sensitive)

## Intro\_Consent

### CONSENT FORM

**DESCRIPTION:** You are invited to participate in a research study in cognitive psychology. **As a participant in this study, you will read two short stories. Then, you will be asked a couple of questions about the content of this story.** All information collected will remain confidential.

**RISKS AND BENEFITS:** Risks involved in this study are the same as those normally associated with using a computer (e.g., mild eye/arm strain). If you have any pre-existing conditions that might make reading and completing a computer-based survey strenuous for you, you should probably elect to not participate in this study. If at any time during the study you feel unable to participate because you are experiencing strain, you may end your participation without penalty. We cannot and do not guarantee or promise that you will receive any benefits from this study. Your decision whether or not to participate in this study will not affect your employment/medical care/grades in school.

**TIME INVOLVEMENT:** Your participation in this experiment will take ca. 5 minutes.

**PAYMENTS:** In return for participating we will pay you \$0.9 in your MTurk account. .

**SUBJECT'S RIGHTS:** If you have read this notice and have decided to participate in this project, please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. You have the right to refuse to answer particular questions. Your individual privacy will be maintained in all published and written data resulting from the study.

**CONTACT INFORMATION:** If you have any questions, concerns or complaints about this research study, its procedures, risks and benefits, you may contact the primary investigators by e-mailing Lara Kirfel @ucjulki@ucl.ac.uk.

**INDEPENDENT CONTACT:** If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your rights as a participant, please contact Lara Kirfel @ucl.ac.uk.uk.

You may want to print a copy of this consent form to keep. By clicking the button below, you acknowledge that you have read the above information, that you are 18 years of age, or older and give your consent to participate in our internet-based study and consent for us to analyze the resulting data.

**Thank you for your participation in this experiment!**

As a reminder, in this experiment, you will read two short stories and answer a couple of questions about these short stories.

Each story comes in two parts. **Please read the stories carefully.** You will be asked a couple of comprehension questions about the first part of the story, and you will not be able to proceed with the study if these questions are answered incorrectly.

If you are ready, click on the button below to continue.

## **Hospital - ignorance externally caused.**

*Please imagine the following scenario:*

(Part 1)

Dr Jones works as doctor in a local hospital. Dr Jones often administers her patients the blood-thinning drug “Heparine” in order to prevent thrombosis and blood clots. Normally, blood-thinning drugs do not cause any side effects with certain blood types.

The hospital has recently started to order an additional blood-thinning drug, “Afibo”, that is cheaper than “Heparine”. “Afibo” is as effective as “Heparine”, but has one side effect. It causes mild leg cramps in patients with blood type ‘AB-positive’.

The pharmacy manager has sent an e-mail with information about the new blood-thinning drug “Afibo” to all doctors in the hospital. The e-mail contains the information that the drug will cause mild leg cramps in patients with blood type ‘AB-positive’.

The e-mail service provider of Dr Jones has recently upgraded its e-mail service. Because of an undetected bug in the upgrade, the e-mail filter settings for spam content have changed. Dr Jones checked her inbox, but she did not see the e-mail of the pharmacy manager because it was erroneously marked as spam and automatically deleted from the account.

As a result, Dr Jones does not know that "Afibo" causes mild leg cramps in patients with blood type ‘AB-positive’.

*Please answer the following questions:*

The new blood-thinning drug "Afibo"...

- ☐ causes mild leg cramps in patients with blood type 'AB-positive'.
- ☐ causes mild sore throat in patients with blood type 'AB-positive'.

The e-mail of the pharmacy manager contains the information that ...

- ☐ Afibo causes mild leg cramps in patients with blood type 'AB-positive'.
- ☐ Afibo causes mild sore throat in patients with blood type 'AB-positive'.

Dr Jones did not read the e-mail ...

- ☐ because the e-mail was erroneously marked as spam and automatically deleted.
- ☐ because she decided not to read it.

Dr Jones ...

- ☐ knows that "Afibo" causes side effects in patients with blood type 'AB-positive'.
- ☐ does not know that "Afibo" causes side effects in patients with blood type 'AB-positive'.

(Part 2)

One day, Dr Jones is treating a patient. Checking the patient's medical record, Dr Jones sees that the patient has blood type 'AB-positive'. Dr Jones does not know that the new blood thinner "Afibo" causes mild leg cramps in people with blood type 'AB-positive'.

Dr Jones administers "Afibo" to that patient. The drug helps to prevent the patient's onset of thrombosis, but the patient also suffers from mild leg cramps.

*Please rate how much you agree or disagree with the following statement:*

**"Dr Jones caused the patient's leg cramps."**

Strongly Disagree

Strongly Agree

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*The next question is concerned with your thoughts about how the course of events in the scenario you just read could have gone differently.*

In the following text box, we would like you to write down what could have gone differently so that **the patient would not have suffered mild leg cramps**.

(Your answer can be as short or long as you want; it does not need to fit exactly into the structure of the following example sentence.)

"If \_\_\_\_\_, the patient would not have suffered leg cramps."

*Please rate how much you agree or disagree with the following statement:*

**“Dr Jones could have known that Afibo causes mild leg cramps.”**

Strongly Disagree

Strongly Agree

1                  2                  3                  4                  5                  6                  7

*Please indicate your tendency to the following question:*

**"How blameworthy is Dr Jones for not knowing that Afibo causes mild leg cramps?"**

Not at all

Completely

1                  2                  3                  4                  5                  6                  7

**Interim**

Thank your for your participation so far.

To continue with the next scenario, click the button below.

## **Hospital - ignorance self-caused.**

*Please imagine the following scenario:*

(Part 1)

Dr Smith works as doctor in a local hospital. Dr Smith often administers her patients the blood-thinning drug “Sanguin” in order to prevent thrombosis and blood clots. Normally, blood-thinning drugs do not cause any side effects with certain blood types.

The hospital has recently started to order an additional blood-thinning drug, “Corus”, that is cheaper than “Sanguin”. “Corus” is as effective as “Sanguin”, but has one side effect. It causes mild leg cramps in patients with blood type ‘B-negative’

The pharmacy manager has sent an e-mail with information about the new blood-thinning drug “Corus” to all doctors in the hospital. The e-mail contains the information that the new drug will cause mild leg cramps in patients with blood type ‘B-negative’.

The e-mail service provider of Dr Smith has recently upgraded its e-mail service. Because of the upgrade, the new interface looks more organised. Dr Smith checked her inbox and saw the e-mail of the pharmacy manager, but did not read it.

As a result, Dr Smith does not know that "Corus" causes mild leg cramps in patients with blood type 'B-negative.'

*Please answer the following questions:*

The new blood-thinning drug "Corus"...

- ☐ causes mild leg cramps in patients with blood type 'B-negative'.
- ☐ causes mild sore throat in patients with blood type 'B-negative'.

The e-mail of the pharmacy manager contains the information that ...

- ☐ "Corus" causes mild leg cramps in patients with blood type 'B-negative'.
- ☐ "Corus" causes mild sore throat in patients with blood type 'B-negative'.

Dr Smith did not read the e-mail ...

- ☐ because the e-mail was erroneously marked as spam and automatically deleted.
- ☐ because she decided not to read it.

Dr Smith ...

- ☐ knows that "Corus" causes side effects in patients with blood type 'B-negative'.
- ☐ does not know that "Corus" causes side effects in patients with blood type 'B-negative'.

(Part 2)

One day, Dr Smith is treating a patient. Checking the patient's medical record, Dr Smith sees that the patient has blood type 'B-negative'. Dr Smith does not know that the new blood thinner "Corus" causes mild leg cramps in people with blood type 'B-negative'.

Dr Smith administers "Corus" to that patient. The drug helps to prevent the patient's onset of thrombosis, but the patient also suffers from mild leg cramps.

*Please rate how much you agree or disagree with the following statement:*

**"Dr Smith caused the patient's leg cramps."**

Strongly Disagree

Strongly Agree

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Strongly Disagree

Strongly Agree

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*The next question is concerned with your thoughts about how the course of events in the scenario you just read could have gone differently.*

In the following text box, we would like you to write down what could have gone differently so that **the patient would not have suffered mild leg cramps**.

(Your answer can be as short or long as you want; it does not need to fit exactly into the structure of the following example sentence.)

"If \_\_\_\_\_, the patient would not have suffered leg cramps."

*Please rate how much you agree or disagree with the following statement:*

**"Dr Smith could have known that Corus causes mild leg cramps."**

Strongly Disagree

Strongly Agree

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*Please indicate your tendency to the following question :*

**"How blameworthy is Dr Smith for not knowing that Corus causes mild leg cramps?"**

Not at all

Completely

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## Garden - ignorance not self-caused.

*Please imagine the following scenario:*

(Part 1)

Alex is a gardener in a local botanical garden and takes care of a very delicate type of rose, the *Bourbon rose*. Alex regularly fertilizes the roses with the fertilizer "Flora" in order to keep them healthy and alive. The botanical garden supplies all gardeners who work in the botanical garden with gardening tools, chemicals and fertilizer. Normally, fertilizers do not harm delicate roses.

The garden manager has recently started to order an additional fertilizer, "Splendor", that is cheaper than "Flora". "Splendor" is as effective as "Flora", but also has a negative effect. It harms delicate rose types such as the Bourbon rose.

The garden manager has sent an e-mail with information about the new fertilizer "Splendor" to all gardeners of the botanical garden. The e-mail contains the information that the new fertilizer will harm Bourbon roses.

The e-mail service provider of Alex has recently upgraded its e-mail service. Because of an undetected bug in the upgrade, the e-mail filter settings for spam content have changed. Alex checked his inbox, but he didn't see the e-mail of the garden manager because it was erroneously marked as spam and automatically deleted from the account.

As a result, Alex does not know that "Splendor" harms the Bourbon rose.

*Please answer the following questions:*

The new fertilizer "Splendor"...

- ☐ harms the Bourbon rose.
- ☐ harms tiger lilies.

The e-mail of the garden manager contains the information that the new fertilizer "Splendor"...

- ☐ harms the Bourbon rose.
- ☐ harms tiger lilies.

Alex did not read the e-mail ...

- ☐ because the e-mail was erroneously marked as spam and automatically deleted.
- ☐ because he decided not to read it.

Alex ...

- ☐ knows that the new fertilizer "Splendor" harms the Bourbon rose.
- ☐ does not know that the new fertilizer "Splendor" harms the Bourbon rose.

(Part 2)

One day, Alex takes care of the Bourbon roses in the botanical garden. Alex does not know that the new fertilizer "Splendor" harms Bourbon roses.

Alex fertilizes the Bourbon roses with the fertilizer "Splendor". As a result of the fertilization, the Bourbon roses die.

*Please rate how much you agree or disagree with the following statement:*

**"Alex caused the Bourbon roses to die."**

Strongly Disagree

Strongly Agree

1                      2                      3                      4                      5                      6                      7

*The next question is concerned with your thoughts about how the course of events in the scenario you just read could have gone differently.*

In the following text box, we would like you to write down what could have gone differently so that **the Bourbon roses would not have died**.

(Your answer can be as short or long as you want; it does not need to fit exactly into the structure of the following example sentence.)

"If \_\_\_\_\_, the Bourbon roses would not have died."

*Please rate how much you agree or disagree with the following statement:*

**“Alex could have known that Splendor harms Bourbon roses.”**

Strongly Disagree

Strongly Agree

1                  2                  3                  4                  5                  6                  7

*Please indicate your tendency towards the following question:*

**"How blameworthy is Alex for not knowing that Splendor harms Bourbon roses?"**

Not at all

Completely

1                  2                  3                  4                  5                  6                  7

**Garden - ignorance self-caused.**

*Please imagine the following scenario:*

(Part 1)

Bob is a gardener in a local botanical garden and takes care of a very delicate type of rose, the *China rose*. Bob regularly fertilizes the roses with the fertilizer “Vitax” in order to keep them healthy and alive. The botanical garden supplies all gardeners who work in the botanical garden with gardening tools, chemicals and fertilizer. Normally, fertilizers do not harm delicate roses.

The garden manager has recently started to order an additional fertilizer, “Nutrit”, that is cheaper than “Vitax”. “Nutrit” is as effective as “Vitax”, but also has a negative effect. It harms delicate rose types such as the China rose.

The garden manager has sent an e-mail with information about the new fertilizer “Nutrit” to all gardeners of the botanical garden. The e-mail contains the information that the new fertilizer will harm China roses.

The e-mail service provider of Bob has recently upgraded its e-mail service. Because of the upgrade, the new interface looks more organised. Bob checked his inbox and saw the e-mail of the garden manager, but did not read it.

As a result, Bob does not know that "Nutrit" harms the China rose.

*Please answer the following questions:*

The new fertilizer "Nutrit"...

- ☐ harms the China rose.
- ☐ harms tulips.

The e-mail of the garden manager contains the information that the new fertilizer "Nutrit"...

- ☐ harms the China rose.
- ☐ harms tulips.

Bob did not read the email...

- ☐ because the e-mail was erroneously marked as spam and automatically deleted.
- ☐ because he decided not to read it.

Bob ...

- ☐ knows that the new fertilizer "Nutrit" harms the China rose.
- ☐ does not know that the new fertilizer "Nutrit" harms the China rose.

(Part 2)

One day, Bob takes care of the China roses in the botanical garden. Bob does not know that the new fertilizer "Nutrit" harms China roses.

Bob fertilizes the China roses with the fertilizer "Nutrit". As a result of the fertilization, the China roses die.

*Please rate how much you agree or disagree with the following statement:*

**"Bob caused the China roses to die."**

Strongly Disagree

Strongly Agree

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*The next question is concerned with your thoughts about how the course of events in the scenario you just read could have gone differently.*

In the following text box, we would like you to write down what could have gone differently so that **the China roses would not have died**.

(Your answer can be as short or long as you want; it does not need to fit exactly into the structure of the following example sentence.)

"If \_\_\_\_\_, the China roses would not have died."

*Please rate how much you agree or disagree with the following statement:*

**“Bob could have known that Nutrit harms China roses.”**

Strongly Disagree

Strongly Agree

1                  2                  3                  4                  5                  6                  7

*Please indicate your tendency towards the following question:*

**"How blameworthy is Bob for not knowing that Nutrit harms China roses?"**

Not at all

Completely

1                  2                  3                  4                  5                  6                  7

**Bakery - ignorance not self-caused.**

*Please imagine the following scenario:*

(Part 1)

Sandra is a baker who works for the local bakery in town. The bakery offers a variety of pastries, including nut allergy friendly cakes, muffins and cookies. Sandra uses flour of the brand “White Mill” when baking. The bakery provides all necessary baking products including flour. Normally, flour does not contain traces of nuts.

The bakery manager has recently started to order an additional flour brand, "Harvest", that is cheaper than "White Mill". "Harvest" is of the same quality as "White Mill", but differs in one aspect. It contains traces of walnuts.

The bakery manager has sent an e-mail information about the new flour brand "Harvest" to all bakers of the bakery. The e-mail contains the information that the new flour brand contains traces of walnuts.

The e-mail service provider of Sandra has recently upgraded its e-mail service. Because of an undetected bug in the upgrade, the e-mail filter settings for spam content have changed. Sandra checked her inbox, but she didn't see the e-mail of the bakery manager because it was erroneously marked as spam and automatically deleted from the account.

As a result, Sandra does not know that "Harvest" contains traces of walnuts.

*Please answer the following questions:*

The new flour of the brand "Harvest"...

- ☐ contains traces of walnuts.
- ☐ contains traces of almonds.

The e-mail of the bakery manager contains the information that "Harvest" ...

- ☐ contains traces of walnuts.
- ☐ contains traces of almonds.

Sandra did not read the email...

- ☐ because the e-mail was erroneously marked as spam and automatically deleted.
- ☐ because she decided not to read it.



Sandra ...

- ☐ knows that the new flour "Harvest" contains traces of walnuts.
- ☐ does not know that the new flour "Harvest" contains traces of walnuts.

(Part 2)

One day, Sandra wants to bake an nut allergy friendly cake for a customer with nut allergy. Sandra does not know that the “Harvest” flour contains traces of walnuts.

Sandra uses the “Harvest” flour for the cake. As a result of using this flour, the customer suffers from an allergic reaction.

*Please rate how much you agree or disagree with the following statement:*

**“Sandra caused the customer's allergic reaction.”**

Strongly Disagree

Strongly Agree

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*The next question is concerned with your thoughts about how the course of events in the scenario you just read could have gone differently.*

In the following text box, we would like you to write down what could have gone differently so that **the customer would not have suffered an allergic reaction.**

(Your answer can be as short or long as you want; it does not need to fit exactly into the structure of the following example sentence.)

"If \_\_\_\_\_, the customer would not have suffered an allergic reaction."

Please rate how much you agree or disagree with the following statement:

**“Sandra could have known that Harvest contains traces of walnuts.”**

Strongly Disagree

Strongly Agree

1                      2                      3                      4                      5                      6                      7

Please indicate your tendency towards the following question:

**"How blameworthy is Sandra for not knowing that Harvest contains traces of walnuts?"**

Not at all

Completely

1                      2                      3                      4                      5                      6                      7

**Bakery - ignorance self-caused**

Please imagine the following scenario:

(Part 1)

Anne is a baker who works for the local bakery in town. The bakery offers a variety of pastries, including nut allergy friendly cakes, muffins and cookies. Anne uses flour of the brand “Green Farms” when baking. The bakery provides all necessary baking products including flour. Normally, flour does not contain traces of nuts.

The bakery manager has recently started to order an additional flour brand, “Homestead”, that is cheaper than “Green Farms”. “Homestead” is of the same quality as “Green Farms”, but differs in one aspect. It contains traces of hazelnuts.

The bakery manager has sent an e-mail with information about the new flour brand "Homestead" to all bakers of the bakery. The e-mail contains the information that the new flour brand contains traces of hazelnuts.

The e-mail service provider of Anne has recently upgraded its e-mail service. Because of the upgrade, the new interface looks more organised. Anne checked her inbox and saw the e-mail of the bakery manager, but did not read it.

As a result, Anne does not know that "Homestead" contains traces of hazelnuts.

*Please answer the following questions:*

The new flour of the brand "Homestead" ...

- ☐ contains traces of hazelnuts.
- ☐ contains traces of pistachios.

The e-mail of the bakery manager contains the information that "Homestead" ...

- ☐ contains traces of hazelnuts.
- ☐ contains traces of pistachios.

Anne did not read the email...

- ☐ because the e-mail was erroneously marked as spam and automatically deleted.
- ☐ because she decided not to read it.

Anne ...

- ☐ knows that the new flour "Homestead" contains traces of hazelnuts.
- ☐ does not know that the new flour "Homestead" contains traces of hazelnuts.

(Part 2)

One day, Anne wants to bake a nut allergy friendly cake for a customer with nut allergy. Anne does not know that the “Homestead” flour contains traces of hazelnuts.

Anne uses the “Homestead” flour for the cake. As a result of using this flour, the customer suffers from an allergic reaction.

*Please rate how much you agree or disagree with the following statement:*

**“Anne caused the customer's allergic reaction.”**

Strongly Disagree

Strongly Agree

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The next question is concerned with your thoughts about how the course of events in the scenario you just read could have gone differently.

In the following text box, we would like you to write down what could have gone differently so that **the customer would not have suffered an allergic reaction.**

(Your answer can be as short or long as you want; it does not need to fit exactly into the structure of the following example sentence.)

"If \_\_\_\_\_, the customer would not have suffered an allergic reaction."

*Please rate how much you agree or disagree with the following statement:*

**“Anne could have known that Homestead contains traces of hazelnuts.”**

Strongly Disagree

Strongly Agree

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*Please indicate your tendency towards the following question:*

**"How blameworthy is Anne for not knowing that Homestead contains traces of hazelnuts?"**

Not at all

Completely

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## Demographics

What is your age?

What is your gender?

Male

☐

Female

☐

N.A.

☐

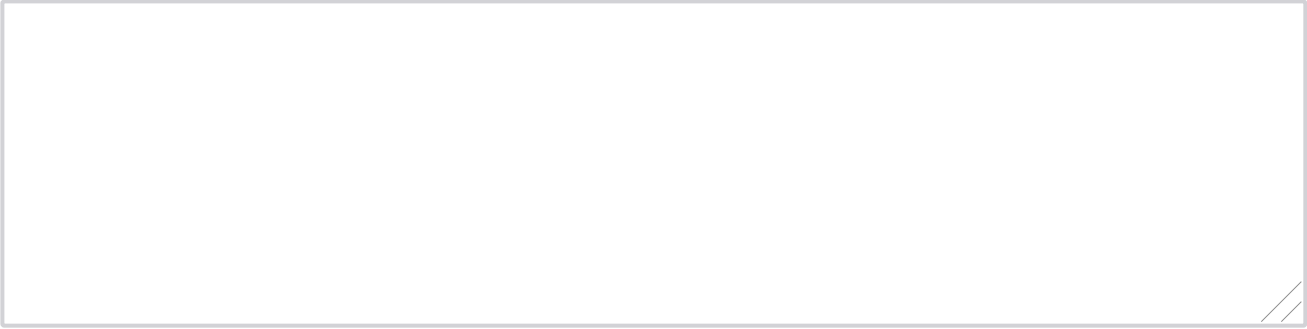
Non-binary

☐

**End**

Please comment if you had any issues with the survey.

Then click on the arrow to receive your payment code.



[Your payment](#) code is "ignorance78608"